

AMENDMENTS TO THE CLAIMS:

Please amend claims 8, 22 and 26 as follows. This listing of claims will replace all prior versions and listings of claims in the application.

1-7. (Cancelled).

8. (Currently Amended) A method in a data processing system having a lookup service with associated services available for use in the data processing system, comprising the steps of:

maintaining a lookup service, the lookup service comprising ~~at least one a flat~~ collection of service items, the service items containing one of (a) a stub or (b) a serialized object for use in accessing at least one of the services;

receiving a request to update the lookup service; and

updating the lookup service such that the associated services unaffected by the update continue to be available for use while the update occurs.

9. (Original) The method of claim 8 wherein the updating step includes the step of:

associating a new service with the lookup service.

10. (Original) The method of claim 8 wherein the updating step includes the step of:

disassociating one of the associated services from the lookup service so that the one service is no longer available for use.

11. (Original) The method of claim 8 wherein the associated services have attributes and wherein the updating step includes the step of:

modifying the attributes of one of the associated services.

12. (Withdrawn) A method in a data processing system having a lookup service with associated services, comprising the steps of:

receiving a request to be notified when the lookup service is updated;

determining when the lookup service is updated; and

generating a notification when it is determined that the lookup service is updated.

13. (Withdrawn) The method of claim 12 wherein the step of receiving includes the step of:

receiving the request from a client, and wherein the generating step includes the step of:

notifying the client of the update.

14. (Withdrawn) The method of claim 12 wherein the step of receiving includes the step of:

receiving the request from a first client, and wherein the generating step includes the step of:

notifying a second client of the update, the second client being different than the first client.

15. (Withdrawn) The method of claim 12 wherein the receiving step includes the step of:

receiving a reference to a callback routine, and wherein the generating step includes the step of:

invoking the callback routine to perform the notification.

16. (Withdrawn) The method of claim 12 wherein the receiving step includes the step of:

receiving the request to be notified when a new service is associated with the lookup service, wherein the determining step includes the step of:

determining when a new service is associated with the lookup service, and wherein the generating step includes the step of:

generating the notification when it is determined that a new service is associated with the lookup service.

17. (Withdrawn) The method of claim 12 wherein the receiving step includes the step of:

receiving the request to be notified when one of the associated services is disassociated with the lookup service, wherein the determining step includes the step of:

determining when the one service is disassociated with the lookup service, and wherein the generating step includes the step of:

generating the notification when it is determined that the one service is disassociated with the lookup service.

18. (Withdrawn) The method of claim 12 wherein the receiving step includes the step of:

receiving the request to be notified when attributes of at least one of the associated services is updated, wherein the determining step includes the step of:

determining when the attributes of the at least one of the associated services is updated, and wherein the generating step includes the step of:

generating the notification when it is determined that the attributes of the at least one of the associated services is updated.

19. (Withdrawn) A method in a data processing system having a lookup service with associated services, comprising the steps of:

sending a request to the lookup service to be notified when the lookup service is updated; and

receiving a notification that the lookup service has been updated.

20. (Withdrawn) The method of claim 19, wherein the sending step includes the step of:

sending the request by a client, and wherein the receiving step indicates the step of:

receiving the notification by the client.

21. (Withdrawn) The method of claim 19, wherein the sending step includes the step of:

sending the request by a first client, and wherein the receiving step includes:

receiving the notification by a second client that is different than the first client.

22. (Currently Amended) A data processing system comprising:

a memory containing:

a lookup service comprising a ~~plurality~~flat collection of service items, the service items containing one of (a) a stub or (b) a serialized object for use in accessing services that are available for use;

a first client for updating the lookup service; and

a second client for utilizing the lookup service while the first client is updating the lookup service; and

at least one processor for running the lookup service, the first client, and the second client.

23. (Withdrawn) A data processing system comprising:

a memory containing:

a lookup service with indications of services available for use, the lookup service for receiving requests for notification of when the lookup service is updated, for determining when the lookup service is updated, and for generating notifications when the lookup service is updated; and

a client for sending a request to the lookup service to be notified when the lookup service is updated; and

at least one processor for running the client and the lookup service.

24. (Withdrawn) The data processing system of claim 23 wherein the memory further includes a second client for receiving a notification that the lookup service was updated.

25. (Cancelled).

26. (Currently Amended) A computer-readable medium containing instructions for controlling a data processing system to perform a method, the data processing system having a lookup service with associated services available for use in the data processing system, the method comprising the steps of:

maintaining a lookup service, the lookup service comprising ~~at least one a flat~~ collection of service items, the service items containing one of (a) a stub or (b) a serialized object for use in accessing at least one of the services;

receiving a request to update the lookup service; and

updating the lookup service such that the associated services unaffected by the update continue to be available for use while the update occurs.

27. (Original) The computer-readable medium of claim 26 wherein the updating step includes the step of:

associating a new service with the lookup service.

28. (Original) The computer-readable medium of claim 26 wherein the updating step includes the step of:

disassociating one of the associated services from the lookup service so that the one service is no longer available for use.

29. (Original) The computer-readable medium of claim 26 wherein the associated services have attributes and wherein the updating step includes the step of:
modifying the attributes of one of the associated services.

30. (Withdrawn) A computer-readable medium containing instructions for controlling a data processing system to perform a method, the data processing system having a lookup service with associated services, the method comprising the steps of:
receiving a request by the lookup service to be notified when the lookup service is updated;
determining when the lookup service is updated; and
generating a notification when it is determined that the lookup service is updated.

31. (Withdrawn) The computer-readable medium of claim 30 wherein the receiving step includes the step of:
receiving the request from a client, and wherein the generating step includes the step of:
notifying the client of the update.

32. (Withdrawn) The computer-readable medium of claim 30 wherein the receiving step includes the step of:

receiving the request from a first client, and wherein the generating step includes the step of:

notifying a second client of the update, the second client being different than the first client.

33. (Withdrawn) The computer-readable medium of claim 30 wherein the receiving step includes the step of:

receiving a reference to a callback routine, and wherein the generating step includes the step of:

invoking the callback routine to perform the notification.

34. (Withdrawn) The computer-readable medium of claim 30 wherein the receiving step includes the step of:

receiving the request to be notified when a new service is associated with the lookup service, wherein the determining step includes the step of:

determining when a new service is associated with the lookup service, and wherein the generating step includes the step of:

generating the notification when it is determined that a new service is associated with the lookup service.

35. (Withdrawn) The computer-readable medium of claim 30 wherein the receiving step includes the step of:

receiving the request to be notified when one of the associated services is disassociated with the lookup service, wherein the determining step includes the step of:

determining when the one service is disassociated with the lookup service, and wherein the generating step includes the step of:

generating the notification when it is determined that the one service is disassociated with the lookup service.

36. (Withdrawn) The computer-readable medium of claim 30 wherein the receiving step includes the step of:

receiving the request to be notified when attributes of at least one of the associated services is updated, wherein the determining step includes the step of:

determining when the attributes of the at least one of the associated services is updated, and wherein the generating step includes the step of:

generating the notification when it is determined that the attributes of the at least one of the associated services is updated.

37. (Withdrawn) A computer-readable medium containing instructions for controlling a data processing system to perform a method, the data processing system having a lookup service with associated services, the method comprising the steps of:

 sending a request to the lookup service to be notified when the lookup service is updated; and

 receiving a notification that the lookup service has been updated.

38. (Withdrawn) The computer-readable medium of claim 37, wherein the sending step includes the step of:

 sending the request by a client, and wherein the receiving step indicates the step of:

 receiving the notification by the client.

39. (Withdrawn) The computer-readable medium of claim 37, wherein the sending step includes the step of:

 sending the request by a first client, and wherein the receiving step includes:
 receiving the notification by a second client that is different than the first client.